

P20799.A01

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant : Thiow Keng TAN et al.

Serial No : Not Yet Assigned

Filed : Concurrently Herewith

For : METHOD AND APPARATUS FOR DYNAMIC LOOP  
AND POST FILTERING

**PRELIMINARY AMENDMENT**

Commissioner of Patents and Trademarks  
Washington, D.C. 20231

Sir:

Prior to calculation of the filing fees and the examination of the above-identified patent application on the merits, the Examiner is respectfully requested to amend the claims as follows:

IN THE CLAIMS

Please amend the claims as follows (a marked-up copy of the claim amendments is provided as an attachment to this Amendment):

6. (Amended-Clean Text) The method according to claim 1, wherein said step of obtaining said filtered picture works on a sub-portion of the picture by comparing quantization parameters of each sub-portion of the picture.

7. (Amended-Clean Text) The method according to claim 1, wherein said step of selecting said reference picture comprises the steps of:

deriving a switching criterion from the coded representation; and  
using said switching criterion for said selection step.

8. (Amended-Clean Text) The method according to claim 1, wherein said step of selecting said reference picture comprises the steps of:

deriving a switching criterion from the reconstructed picture; and  
using said switching criterion for said selection step.

9. (Amended-Clean Text) The method according to claim 7, wherein said step of deriving said switching criterion comprises the steps of:

extracting a plurality of quantization parameters from the coded representation;  
calculating an average quantization parameter for the picture; and  
comparing said average quantization parameter to a predefined threshold.

10. (Amended-Clean Text) The method according to claim 7, wherein said step of deriving said switching criterion comprises the steps of:

extracting a plurality of quantization parameters from the coded representation;  
calculating an average quantization parameter for the picture; and  
comparing said average quantization parameter to a plurality of predefined threshold.

11. (Amended-Clean Text) The method according to claim 9, further comprising the steps of:

producing an output image that is filtered if said quantization parameter is above a first threshold; and

storing said reference picture that is filtered if said quantization parameter is above a second threshold.

17. (Amended-Clean Text) The apparatus according to claim 12, wherein said means for obtaining said filtered picture works on a sub-portion of the picture by comparing quantization parameters of each sub-portion of the picture.

18. (Amended-Clean Text) The apparatus according to claim 12, wherein said means for selecting said reference picture comprises:

a means for deriving a switching criterion from the coded representation; and

a means for using said switching criterion for said selection means.

19. (Amended-Clean Text) The apparatus according to claim 12, wherein said means for selecting said reference picture comprises:

a means for deriving a switching criterion from the reconstructed picture; and

a means for using said switching criterion for said selection means.

20. (Amended-Clean Text) The apparatus according to claim 18, wherein said means for deriving said switching criterion comprises:

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a means for extracting a plurality of quantization parameters from the coded representation;

a means for calculating an average quantization parameter for the picture; and

a means for comparing said average quantization parameter to a predefined threshold.

21. (Amended-Clean Text) The apparatus according to claim 18, wherein said means for deriving said switching criterion comprises:

a means for extracting a plurality of quantization parameters from the coded representation;

a means for calculating an average quantization parameter for the picture; and

a means for comparing said average quantization parameter to a plurality of predefined threshold.

22. (Amended-Clean Text) The apparatus according to claim 20, further comprising:

a means for producing an output image that is filtered if said quantization parameter is above a specified higher threshold; and

a means for storing said reference picture that is filtered if said quantization parameter is below a specifies lower threshold.


#### REMARKS

By the above amendment, the claims have been amended to delete multiple dependency.

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If there should be any questions, the Examiner is invited to contact the undersigned  
at the telephone number listed below.

Respectfully submitted,  
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MARKED-UP COPY OF AMENDED CLAIMS

6. (Amended) The method according to [any one of claims 1 to 5] claim 1, wherein said step of obtaining said filtered picture works on a sub-portion of the picture by comparing quantization parameters of each sub-portion of the picture.

7. (Amended) The method according to [any one of claims 1 to 5] claim 1, wherein said step of selecting said reference picture comprises the steps of:

deriving a switching criterion from the coded representation; and  
using said switching criterion for said selection step.

8. (Amended) The method according to [any one of claims 1 to 5] claim 1, wherein said step of selecting said reference picture comprises the steps of:

deriving a switching criterion from the reconstructed picture; and  
using said switching criterion for said selection step.

9. (Amended) The method according to claim 7 [or 8], wherein said step of deriving said switching criterion comprises the steps of:

extracting a plurality of quantization parameters from the coded representation;  
calculating an average quantization parameter for the picture; and  
comparing said average quantization parameter to a predefined threshold.

10. (Amended) The method according to claim 7 [or 8], wherein said step of deriving said switching criterion comprises the steps of:

extracting a plurality of quantization parameters from the coded representation;

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calculating an average quantization parameter for the picture; and

comparing said average quantization parameter to a plurality of predefined threshold.

11. (Amended) The method according to claim 9 [or 10], further comprising the steps of:

producing an output image that is filtered if said quantization parameter is above a first threshold; and

storing said reference picture that is filtered if said quantization parameter is above a second threshold.

17. The apparatus according to [any one of claims 12 to 16] claim 12, wherein said means for obtaining said filtered picture works on a sub-portion of the picture by comparing quantization parameters of each sub-portion of the picture.

18. (Amended) The apparatus according to [any one of claims 12 to 18] claim 12, wherein said means for selecting said reference picture comprises:

a means for deriving a switching criterion from the coded representation; and

a means for using said switching criterion for said selection means.

19. (Amended) The apparatus according to [any one of claims 12 to 16] claim 12, wherein said means for selecting said reference picture comprises:

a means for deriving a switching criterion from the reconstructed picture; and

a means for using said switching criterion for said selection means.

20. (Amended) The apparatus according to claim 18 [or 19], wherein said means for deriving said switching criterion comprises:

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a means for extracting a plurality of quantization parameters from the coded representation;

a means for calculating an average quantization parameter for the picture; and

a means for comparing said average quantization parameter to a predefined threshold.

21. (Amended) The apparatus according to claim 18 [or 19], wherein said means for deriving said switching criterion comprises:

a means for extracting a plurality of quantization parameters from the coded representation;

a means for calculating an average quantization parameter for the picture; and

a means for comparing said average quantization parameter to a plurality of predefined threshold.

22. (Amended) The apparatus according to claim 20 [or 21], further comprising:

a means for producing an output image that is filtered if said quantization parameter is above a specified higher threshold; and

a means for storing said reference picture that is filtered if said quantization parameter is below a specifies lower threshold.